



F.Y.B. Sc.
SEMESTER I
Course Title: ENVIRONMENTAL STUDIES

Course Code: ENV-S1P1 2CR24 [CREDITS - 02]

ENVIRONMENTAL STUDIES		
Course learning outcome		
After successfully completing this course, students will be able to:		
<ul style="list-style-type: none"> • Get the knowledge the structural and functional components of ecosystem. • They understand the interaction of living components of environment. • They can also deduce the interaction of living and non-living components and their balance in nature. • Able to apply their knowledge of conservation practically. • Demonstrated an Understood of ecological relationships between organisms and their environment. • Presented an overview of diversity of life forms in an ecosystem. • Explained and identified the role of the organism in energy transfers 		
Module 1	Introduction	[10L]
Learning Objective: Different branches of Environment		
Learning Outcomes:		
<ul style="list-style-type: none"> • They understand the interaction of living components of environment. • They can also deduce the interaction of living and non-living components and their balance in nature. • Able to apply their knowledge of conservation practically. 		
1.1	<ul style="list-style-type: none"> • Multi-Disciplinary Nature of Environmental Studies • Definition of Environment • Scope of Environmental Studies • Importance of Environmental Studies and Natural Resources • Productive Value of Nature • Aesthetic/ Recreational Value of Nature • Institutions working for Environment (BNHS, WWF-I, CSE, CEE, BSI, ZSI etc.) 	[10L]
Module 2	Ecosystem	[10L]
Learning Objective : Types of Ecosystem		



Learning Outcomes:

- Demonstrated an Understood of ecological relationships between organisms and their environment.
- Get the knowledge the structural and functional components of ecosystem.
- Presented an overview of diversity of life forms in an ecosystem.
- Explained and identified the role of the organism in energy transfers.

2.1	<ul style="list-style-type: none"> • Concept of an Ecosystem • Structure and Functions of an Ecosystem • Producers, Consumers and Decomposers • Energy flow in the Ecosystem: • The Water Cycle • The Carbon Cycle • The Oxygen Cycle • The Nitrogen Cycle • The Energy Cycle and Integration of Cycles in Nature • Ecological Succession 	[10L]
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References:

1. Odum, E.P. 1971. Fundamentals of Ecology. W.B. Saunders. Reference Books:
2. Groom. B. & Jenkins. M. 2000. Global Biodiversity: Earth's Living Resources in the 21st Century. World Conservation Press, Cambridge, UK.
3. Gurevitch, J., Scheiner, S. M., & Fox, G. A. 2002. The Ecology of Plants. Sinauer associates incorporated.
4. Loreau, M. & Inchausti, P. 2002. Biodiversity and Ecosystem functioning: Synthesis and Perspectives. Oxford University Press, Oxford, UK.
5. Pandit, M.K., White, S.M. & Pocock, M.J.O. 2014. The contrasting effects of genome size, chromosome number and ploidy level on plant invasiveness: a global analysis. New Phytologist 203: 697-703

Mapping of CLOs and PSOs

Course Learning Outcomes	Programme Outcomes					
	1	2	3	4	5	6
Get the knowledge the structural and functional components of ecosystem.	√					
They understand the interaction of living components of environment.	√					
Explained and identified the role of the organism in energy transfers		√				
Demonstrated an Understood of ecological relationships between organisms and their environment.			√			
Able to apply their knowledge of conservation practically.			√			